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ENG 2420

### Cover Letter

Dear Professor Belli,

I'm looking forward to never writing another paper again. YOU HAVE RUINED WRITING FOR ME! Just kidding. As a quick aside, writing in this class was the greatest time I've had writing in so long. It was so great that I was afraid I wouldn't write again after I was done with the class. One thing led to another and I made a blog about video games. It's gonna launch next month and I've got a few pieces in the can and it feels good. So thank you for that, Professor Belli.

Now on to this paper, guess who procrastinated until the last minute again? Not quite the last minute, I've still got a fair bit of time to thoroughly edit this. I just think I spent way too much time on the research front and not the paper front. I'm typing this up because I stalled on the actual forward progress that I had been making and I was hoping writing this would help the creative juices flowing. I think this is shaping up to be good. I know you're going to have a big problem with it though.

I wanted to write about the dangers of engineering so I tried to relate it to examples of engineering gone wrong in popular culture. But that wasn't enough so now speculative fiction as whole is a big part of the paper, as a matter of fact it makes up the bulk of the beginning of it. I briefly touched on it in the presentation but the more research I did (there has been soooo much research) the more tackling speculative fiction seemed like a pretty interesting thing to talk about. Plus speculative fiction has informed actual scientific development so much that the two really do deserve to share this paper. And obviously I needed to cut myself out of the paper once I realized I couldn't do first person so lets just say there was a lot of revision to be done.

I hope you enjoy reading this as much as I enjoyed writing this because I didn't! Haha, it's been a pleasure.

I just realized this needs to be single spaced so I guess you'd like to hear more. Well there isn't much to say that I haven't already mentioned. Your "technique" for research paid off in spades. Of course by technique I mean type in buzzwords and see what pops up. Like "engineer" and "responsibility" or "speculative fiction" and "danger". Unfortunately due to the nature of this success it greatly upset that so much of what I had already done needed to be scrapped or repurposed. There's about a million things saved to a research folder on chrome and like five things work like I needed them to. It's great. I really don't enjoy research papers if you can't already tell.

The reason I don't is because they are almost never something I stand for. Obviously the main idea behind this project was to come up with an idea to explore and then research it but it was lacking for me. When I'm discouraged from using my own words and encouraged to use someone else's, it leaves a bad taste in my mouth. I like writing that can stand on it's own, not uses other works as crutches. And I know they aren't meant to be crutches but I can't really stop myself from thinking otherwise. Because for as much fun as writing for this class has been, I'll be the first to admit I'd happily never do any of this again. I think I'm going to pick up writing stories again. Plus I have my new side project to make writing fun again.

What I did take away from this paper though is that almost no idea remains the same through all iterations. I must've rebooted this project at least five times before I finally landed on a definitive thing and even that is still a little too close to the original product. I'm afraid for the paper because it might suffer because of my non-compliance. I just couldn't go narrower, my ideas are bigger. And sure they aren't quite as fleshed as they could be but give me a month, a good idea and free reign over what goes in and I'll deliver the best darn paper ever.

By the way, I appreciate how you weaseled your way around the traditional draft. You did have the traditional draft, which I didn't do because this paper just wasn't ready, but we still basically made one with the presentations so good on you. I appreciate it when teachers apply the pressure because I'm an incredibly lazy student. I'm going to get going now because I'm down to an hour before this is due.

Moises Taveras

ENG 2420: Science Fiction

### Avoiding the Darkest Timeline

Somewhere in the deep recesses of science fiction history, the prospect of a brighter and better tomorrow died. In its place arose a dark nihilistic vision of our future but alas it wasn't without purpose. Once sci-fi writers started realizing their predictions were coming true, they decided to shift gears. They started writing about darker times because they understood that this was their future or at the very least a possible one; for as much as they loved the genre, they needed to explore what could happen so that they could avoid the darkest possible timeline. It was their duty to warn their peers, friends and family that technology wasn't a toy. But the responsibility didn't just fall on sci-fi writers. It also falls on society. It also falls on engineers. And most of all it falls on each one of those groups being able to properly communicate with one another to avoid falling into turmoil.

Beginning with the concept of speculative fiction is a good place to start. The textbook definition would have you believe that it's the broader genre of science fiction. Though there is some validity to this argument, it is important that there be a distinguishing feature. Sci-Fi doesn't need to concern itself with our future or outlandish technology. This is what speculative fiction touches on, the future and specifically how scientific advancements has an effect on it. Take the show Black Mirror for example, the very first episode is a masterful hour of misdirection. It isn't because you don't see what's coming, but it also is that at the same time. The plot is tense but predictable and has an ending that despite being shocking isn't outlandish. No, what it does is give you absolutely no clue what the next episode will be like, or what the

one after that will be. Part of that is because of the nature of the show, it is an anthology series but it's mostly because of how it clashes with the notion of speculative fiction that the show tackles throughout its entirety. It's an episode about how social media and how the hive-mind mentality it has bred desensitizes us to people today. Nothing about it was new or non-existent, it directly took on the huge problem of the disconnect people have towards one another because of the existence of social media. This is not speculative fiction.

Speculative fiction is instead almost every other episode of the show. Take the season 3 premiere *Nosedive* for example. It also tackles social media, a modern antagonist in the genre. In it, your social standing is an actual rating that determines everything for you like whether you can get a discount on food, in to your work building or even get approved for a loan. It's taking a modern concept, the notion of popularity on social media and the method by which it's measured (likes) and pushes it forward a few generations. By positing theoretical situations of where people are going, writer and creator of the show, Charlie Brooker, has done his job. That job of course is to inform.

You see, speculative fiction doesn't just posit theories of our future, it informs it. In an interview with *The Atlantic*, two researchers, Dan Novy and Sophia Brueckner, of MIT said, "... if you look at the great advances in science and technology during most of the 20th and 21st centuries, they are often preceded by descriptions in works of science fiction written decades before." Speculative fiction is the melding of science fiction and reality to make science fact. These two researchers were leading a course at MIT called *Science Fiction to Science Fabrication* which concerns itself with how we can examine examples of science fiction to analyze our present and possibly explore the future of where our technology can go. In an

interview with The Atlantic, they list off some examples of science fiction coming to life such as the taser which originated in a book called “Tom Swift and his Electric Rifle” and taser is actually an acronym for **Thomas A. Swift’s Electric Rifle**. Evidently according to them, the fantastical element of sci-fi is integral to the identity of this world because it isn’t just peoples imaginations run amok, it’s creative people coming up with ideas that they are more than capable of making a reality.

Not all things that we come up with are fun and games though. Clearly escalators and microwaves are the best inventions man has ever come up with but for each one of those there is a gun or bomb out there. In America alone, there’s roughly a hundred-thirteen guns for every hundred people so just in this country, we are already outnumbered by technology’s evil bastard child. In “The Power of Science Fiction: Exploring Sci-fi’s Relationship to Real-World Innovation”, researcher and all around tour-de-force Dennis Cheatham speaks on the power that science fiction has over our future. The primary method by which it has such a direct impact on our future is by weaponry. In it, he cites H.G Wells and his novel *The World Set Free* , in which the protagonist is successful in creating an atomic bomb as an example of how our reality and the reality that authors provide go hand in hand. He acknowledges that the idea of an atomic bomb isn’t novel and that people were already working on it but goes on to say that, “ This isn’t to say that scientists who worked on the first atom bomb read or were influenced by *The World Set Free*, but it does highlight the fact that science fiction is about the concepts, technologies and possibilities of the future.”(Cheatham) With the power of speculative fiction, now comes the responsibility of the engineer and to possibly an even greater degree, society as a whole.

See, the writers are responsible for positing these world for people to see or read about. But after that, the torch is passed. Everything is laid bare on the table, and society needs to pick up whatever they want or throw it out. The way these ideas are laid out for us are quite simple: pick up a book, go to the movies, watch something on tv, or play a video game. These are just the more popular methods by which ideas are carried nowadays but the point should be clear: the feelers have been sent out ages ago to pick up on what society thinks is acceptable and what need to be further retooled. Or at least they should've been. Creators took it upon themselves long long ago to stop leaving it up to people to decide what they want. Now instead, as mentioned in the intro, everything is tinged with a bit of darkness or it's overtly dark.

For example, take the hit show Westworld. It primarily concerns itself with a western themed amusement park in which guests are free to do whatever they want in a world populated by "Hosts" or AI that are programmed to run according to a predetermined program. On the surface level, this would seem like dumb fun. But instead it's quite the opposite. Most guests idea of fun in this world is to embark on quests that embody the spirit of the Wild West including bounty hunts, petty thievery, holding up a train, riding across the landscape on a kick-ass horse etc. If they aren't doing that, they're probably at a saloon getting wasted and looking for someone to spend the night with. While, these are admittedly not the best things to call fun pastimes they are nonetheless mild forms of escapism. But there are quite a number of people whose fun is derived from hunting down hosts who are harmless, torturing them, tearing them to pieces, or even raping them. Meanwhile, these AI's are steadily inching closer towards being fully conscious beings who are well aware of what people are doing to them day in and day out. By the end of the season, the AI have become conscious and enact their revenge in a slaughter.

In the video game *Inside*, you take on the role of a little boy. He goes nameless and voiceless for the entirety of the game as you try to maneuver him in and out of factories and cities where men and women in formal wear usher husks of brainless working class people to do their bidding. The analogy really doesn't get any simpler than that. By the end, the boy joins with other people to form a blob, a manifestation of all the rage the subservient people have been forced to keep buried deep down. This blob then proceeds to wreak havoc and also go on a slaughter in the lab as it tries to find answers and maybe even freedom.

This is what most sci-fi is: a world gone wrong whether the audience knows it or not. *Westworld* isn't just about things going horribly wrong in a park one day. It's about the danger that humans risk in designing AI like Siri, or Cortana or even Samantha from *Her*. It's also about how terrible people are and how technology can distance people from being just that: people. Of course, *Westworld* would retort by suggesting humans have always been this bad and distant when Anthony Hopkins character says, "They're here because they want a glimpse of who they could be." Who they could be being rapists, killers and everything between, of course. For all the terrible things humans do to hosts in *Westworld*, there are people in this reality that do the same thing on a smaller scale so it's hard to argue there. Imagine a world where that behavior is encouraged and those people are empowered. Then stop imagining because Donald Trump is now President of the United States. In *Inside*, technology created a gap between people, those who could afford it and those who couldn't. Those who could, forced their will on those who couldn't until they became their slaves, leaving the world in the hands of rich megalomaniacs.

Society needs to look further inward and really sort themselves out before sci-fi writers can trust them to make any snap decisions on what dictates everyone's future. Maybe even more so

than that, people need to get over this control issue that they seem to have. A controlled environment isn't a bad thing, but the problem with scientific development is that it has no chill. Everything needs to ramp up continually and if there's one takeaway scientists should've gotten from the Cold War, it's that a war of escalation is the worst possible thing for the world. If Inside's idea of worldwide control is too outlandish, then take Ex Machina. In that movie a single man designs a single robot with the capability of being a human. It should be a great thing except engineering shouldn't go that far. It circles back to the notion of utmost control over everything that seems to plague mankind and how the more you try to play God, the more dangerous life gets.

Which brings up the last line of defense: engineers. Or maybe as the guys from Ex Machina would put it, gods. These are the women and men who are directly responsible for your microwaves, your iPhone and your nuclear weaponry. See how that escalates? It shouldn't have. And there's even more risk if it goes undeterred. Besides the proliferation of nuclear weaponry, further technology is currently being worked on like nanotechnology. In 2014, a female chemist was performing experiments with nanotechnology up until she got exposed to some. In typical sci-fi horror fashion, it began to show symptoms on her such as throat irritation, nasal congestion etc. The point being of course that nanotechnology is the first step in the door to a breakthrough in genetic engineering: the practice of designing life. But even in small doses, we have no control over it so the fear is one that came up a lot in the research which was referred to as "grey goo". Grey goo for lack of a really solid definition is the concept of the proliferation of nanotechnology to the point where it is everywhere but out of human control. Once it goes rogue, the assumption is that it will reconstruct everything into...grey goo. Yes, it is quite silly and yes it is very



apocalyptic but it's silly to dismiss this as if it's a thing that could never happen. And if the predictive power of speculative fiction is as strong as the research says it is, people should be very scared.

It all kind of come back to the idea of ethics in engineering. Engineers are very ambitious people who just want to repair the world and make it an easier place to exist. But their responsibility is to people first and to the further development of technology second. It's a concept that is well understood; no one really wants to be known as the guy that ends the world. But technology is toeing the line at this point. Androids are becoming sentient and people own them. Eventually they'll be commercial products and everyone will have robotic slaves. You needn't look any further than Blade Runner or Do Androids Dream of Electric Sheep? to see where that can land everyone. Nanotechnology is being worked on and yes it could possibly be used to rework peoples genes and have more "perfect" humans but in what world does fiddling with the basic identity of a person sound right? This is why all three of the groups need to be in contact.

"Fiction allows you to live more lives in the space-time of one lifetime than you would normally be able to.", according to the The Atlantic interview. This is essential to maintaining what little balance exists now. If the storytellers can weave compelling tales of what the future has in store, maybe society will react to it in an appropriate way. If they can manage to get their issues straight, maybe it would be easier for engineers to service the people without holding back or going too far. A balance can be struck because everyone can't just come to a standstill.

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